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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/762,579	02/09/2001	Ulrich Daum	LP-1799	5245

7590

12/31/2002

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EXAMINER

OH, TAYLOR V

ART UNIT

PAPER NUMBER

1625

DATE MAILED: 12/31/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/762,579

Applicant(s)

DAUM ET AL.

Examiner

Taylor Victor Oh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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The Status of Claims :

Claims 6-20 are pending.

Claims 1-5 has been canceled.

Claims 6-20 are rejected.

Applicant's arguments with respect to claims 6-20 have been considered but are moot in view of the new ground(s) of rejection.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 6-8 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 18 of U.S. Patent No. 5,932,762.

Although the conflicting claims are not identical, they are not patentably distinct from each other because U.S. Patent No. 5,932,762 discloses the production of an aryl cyanate and the derivatives of the aryl cyanate compounds. Furthermore, the reference describes expressly some of the claimed limitation such as " and /or with those

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compounds of the formula I in which n and m deviate from the above definitions by both being 1."

However, the instant invention differs from the reference in that the claims have used different terminologies to describe the limitations of the invention.

Even so, the core invention is the same regardless of using different terminologies to name the same kinds of compounds as claimed; furthermore, there is no patentable distinction between them.

Claim Rejections - 35 USC § 112

Claims 6, 11, 13-15, 18-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 6, it is directed to one unsaturated oligophenol cyanate compounds of the formula , a block oligomer; however, the claim also recites in the last three lines that it encompasses mixture of different compounds : namely, " and /or with those compounds of the formula I in which n and m deviate from the above definitions by both being 1."

In other words, the claimed is directed to compounds of the formula I, but then specifically includes compounds not covered by I as claimed. Therefore, this is vague and indefinite. An appropriate correction is required.

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In claim 11, a phrase "other components of a lacquer" is written. However, this is vague and indefinite as to what "other components " could be present in the lacquer. An appropriate correction is required.

In claims 13 and 18, a term " a substrate" is written. However, this is vague and indefinite as to what kind of the substrate can be used in the process. An appropriate correction is required.

In claims 14-15 and 19, a phrase "other components of " is written. However, this is vague and indefinite as to what "other components " could be present in the vanish or the lithographic one or the solder resist. An appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 6-13 are rejected under 35 U.S.C. 102(b) as being anticipated clearly by Woo et al (U.S.4,713,442).

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Woo et al discloses a preparation of polyaromatic cyanate esters by reacting suitable polyaromatic phenols with cyanogens chloride in the presence of a tertiary amine (see col. 4 ,lines 23-40). Furthermore, the prepolymers are cyanate group containing polytriazines of liquid; these prepolymers may be converted to high molecular weight polytriazines by polymerization (see col. 9, lines 5-7). In addition, the prepolymers are useful in the production of coatings on such substrates as impregnating lacquers (see col. 9, lines 9-12). Also, it is possible to impregnate fibrous fillers or reinforcing materials with the aromatic cyanates (see col. 10, lines 7-10). This is identical with the claims.

Claim Rejections - 35 USC § 103

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woo et al (U.S.4,713,442).

Woo et al discloses a preparation of polyaromatic cyanate esters by reacting suitable polyaromatic phenols with cyanogens chloride in the presence of a tertiary amine (see col. 4 ,lines 23-40). Furthermore, the prepolymers are cyanate group containing polytriazines of liquid; these prepolymers may be converted to high molecular weight polytriazines by polymerization (see col. 9, lines 5-7). In addition, the prepolymers are useful in the production of coatings on such substrates as impregnating lacquers (see col. 9, lines 9-12).

However, the instant invention differs from the reference in that the preparation of the radiation-curable varnish and the preparation of a radiation-curable solder resist for a circuit board are not specified.

Even so, the reference does teach broadly that the prepolymers are useful in the production of coatings including varnish and solder resist, on such substrates as impregnating lacquers or laminating resins (see col. 9, lines 9-12). Furthermore, the end

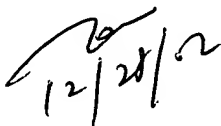
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products combined with reinforcing materials may be used in electrical engineering, in molding construction (see col. 10, lines 34-37).

Therefore, it would have been obvious to the skilled artisan in the art to have motivated to prepare the radiation-curable varnish and the radiation-curable solder resist for the circuit board. This is because the reference does indicate that the polymerized polyaromatic cyanate esters can be employed to various applications including varnish, and solder resist for the circuit board.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to T. Victor Oh whose telephone number is (703) 305-0809. The examiner can normally be reached on Monday through Friday from 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alan Rotman, can be reached on (703) 308-4698. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-4556.


12/28/2


D. MARGARET SEAMAN
PRIMARY EXAMINER